

The Influence of Transforming the Role of Women Farmers on Access to Resources: A Gender Sociology Perspective in Agriculture

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Transformation of the role of women farmers is changes in the role of women farmers after participating in an empowerment program through extension activities and skills training. This research examines the role transformation of farm women after participating in empowerment programs through extension activities and skills training. Using a mixed-method approach, the study combines a quantitative explanatory survey with qualitative descriptive analysis. Conducted in Lambusa Village and Pombulaa Jaya Village, Konda Sub-district, from January to June 2024, data were collected through observation, questionnaires, in-depth interviews, and official documents. Quantitative data were analyzed using SPSS 26.0, while qualitative data underwent reduction, presentation, and conclusion drawing. Results indicate that agricultural extension and skills training significantly increase farm women's access to resources (regression coefficient: 2.679) and contribute to more equitable resource distribution. The study concludes that inclusive policies supporting gender equality effectively promote farm women's role transformation, strengthening their community position and improving resource access.

Keywords: Influence, transforming, role, women farmers, access resources, agriculture sociology, gender.

INTRODUCTION

Access to resources is important for women's empowerment, which impacts household food security and the achievement of sustainable development goals (SDGs), including SDG-5 on gender equality (Haque *et al.*, 2024). The participation of women farmers in shared resource governance is important, but under-researched. This study shows that social networks and unequal access to resources influence women's representation in governance processes, revealing disparities in empowerment and gender equality efforts (Méndez-Barrientos *et al.*, 2020).

Empowering women in farming communities is very important to improve family welfare and agricultural productivity. By providing training and access to resources, women can contribute more to local economic development (Jisso *et al.*, 2022). Farming women who have access to resources play a more significant role in family decision-making. The research results show that female farmers have less access to agricultural technology, resources, and information; higher combined productive and domestic workload; and that farmers of both genders want more female

extension officers (Witinok-Huber *et al.*, 2021). Empowering women in farming communities, especially farmers' wives, faces the challenges of access to productive resources and skills training, as well as changes in agricultural policies that affect the price and availability of training programs. Research in East Java reveals the important role of women in agriculture, despite limited access and control. Women's groups can empower women to increase access and control of the economy and knowledge (Noviryani *et al.*, 2019). Empowering women in farming communities is essential for the country's progress (Singh *et al.*, 2021). The Women's Empowerment in Agriculture Index measures women's access to resources, and the importance of adapting to local context for effective public policy (Gupta *et al.*, 2019). In the context of women's empowerment in farming communities, this study found that the level of empowerment is low, especially among women, which has an impact on food security (Ashagidigbi *et al.*, 2022). From a gender sociology perspective, inequality in access to resources strengthens oppressive patriarchal structures. Research shows gender inequality in parental financial incentives, but it is not clear under what conditions this inequality is socially acceptable (Tisch and Gutfleisch,

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2023). This study highlights that gender equality must be accompanied by justice, without differences. The rights of every individual, including women, are regulated in Law Number 39 of 1999. However, society often assumes that gender equality occurs if each party is responsible according to their role (Ismail *et al.*, 2020). In patriarchal family structures, women often do not have access to economic resources, making them vulnerable to discrimination and violence, as seen in Usilampatti, Tamil Nadu (Ramamoorthi, 2020). In English history, the Tudor dynasty attracted attention because of female figures such as Catherine of Aragon and Elizabeth I who faced challenges to oppressive patriarchal structures. Both show how power and gender interact in the realm of monarchy, providing sociological insight into the role and meaning of women's power (Zhang, 2023). Research highlights a lack of inclusiveness in the economy as an obstacle to sustainable development. This study uses various methods to analyze socio-economic processes, emphasizing the importance of equal access to resources for all members of society as a main component of sustainable development, to achieve inclusive and sustainable economic growth (Krysovatty *et al.*, 2024). Increasing the welfare of women farmers is prioritized to secure social justice and increase their role in national economic development (Ross, 2018). The development of mangrove ecotourism in Langsa City has had a positive impact on the economic and social welfare of the women's farming community. This is reflected in increased economic activity, new job opportunities, increased income, and the provision of better public facilities. Research using the Human Development Survey to explore the impact of social capital, such as membership in local community organizations and social networks, on the economic and social well-being of women farmers. The results show that such social capital is significantly associated with higher monthly per capita consumption expenditure and greater ownership of physical assets, as well as reducing the likelihood of households living below the poverty line (Jha and Kelley, 2023). The social and economic aspects of sustainable tourism significantly influence the social and economic well-being of communities, with a strong influence from both aspects (Sulthony *et al.*, 2023). Social capital significantly improves the economic well-being of these communities, providing new insights for community development policies (Tamboto *et al.*, 2018). Transformation of the role of women farmers is changes in the role of women farmers after participating in an empowerment program through extension activities and skills training. The transformation of the role of women farmers supports sustainable development through gender justice and social inclusion. The transformation of women's roles in agriculture using the Feminist Agri-Food Systems Theory (FAST) theory shows that although an increase in women's involvement in agriculture is visible, significant changes in gender roles are still slow. However, women farmers show

increased self-confidence as farmers and seek agricultural knowledge and services that suit their needs (Tsiaousi and Partalidou, 2023). But women farmers, as the main food producers, face challenges in carrying out income-generating activities such as micro-enterprises due to social norms and need time to adapt (Gladwin *et al.*, 2021).

Global agrarian resistance to industrialization and corporatization of agriculture highlights the role of women farmers in fighting for gender justice. La Vía Campesina reveals the dynamics of movements fighting for food sovereignty and global solidarity, showing the courage and commitment of women farmers in facing neoliberalism policies (Wilson, 2022). The important role of women farmers in fighting for gender justice and sustainability reflects cross-border solidarity and commitment to food sovereignty and gender equality (Gray, 2021).

Poor access to resources exacerbates gender inequality in farming communities, especially for women farmers. Access and benefit-sharing policies have not been effective in empowering local communities, which are still poor despite having traditional knowledge about genetic resources. This research shows the need for non-timber forest product processing facilities to improve the community economy (Nakanyete *et al.*, 2024). Limited access to resources and limited formal rights through top-down management exacerbate gender inequality, especially for poor women in rural areas. This increases their vulnerability to the climate crisis and limits their participation in natural resource management and adaptation to climate change (Tantoh *et al.*, 2021).

Many communities depend on wetlands, lakes and rivers for their livelihoods. Social norms and power relations limit certain groups access to natural resources, especially women. This exacerbates gender inequality, where poverty results from women's limited access to resources or vice versa exacerbates these inequalities (COLE *et al.*, 2024). With extraordinary natural resources and a deep cultural heritage, agritourism offers valuable opportunities for sustainable growth in agricultural communities. Better access to resources in farming communities, improved socio-economic status, and reduced vulnerability can lead to beneficial outcomes (Zvavahera and Chigora, 2023). Gender inequality in farming communities remains a challenge in the theory and practice of community-based collective action. An innovative approach that combines environmental justice, value chain inclusion, and collective action theory to diagnose inequities in community-based organizations (CBOs) and identify strategies to address them, particularly in farming communities (Maeder *et al.*, 2024). Community-based waste management practices reinforce gender inequality by relying on women. Similar are the inequities in farming communities, where women often perform undervalued care work. To achieve sustainability, it is necessary to involve men and women and overcome gender inequality in the agricultural



sector (Pakasi *et al.*, 2024). The study shows gender inequality in the welfare of women entrepreneurs in 80 countries. In low and middle-income countries, women entrepreneurs have lower welfare than men. Gender inequality, low financial development, and rigid gender roles magnify this gap. Female entrepreneurs with low education and many children are more vulnerable to reporting low welfare (Tantoh *et al.*, 2021).

Farming women often do not have rights to land and agrarian resources. Women farmers often face inequalities in land ownership rights, education, control over resources, and access to agricultural inputs and services, such as technology, fertilizer, and seeds. This results in lower productivity compared to male farmers and lower participation in commercial farming (Croppenstedt *et al.*, 2023). Women farmers in rural areas face gender discrimination in land ownership rights, even though they play an important role in reducing poverty through agriculture. Discriminatory traditions still influence women's perceptions and rights to land, limiting their ability to invest long-term (Fonjong *et al.*, 2023). This study shows that women farmers often do not have rights to land, which becomes an obstacle in the dynamics of household work on shared land (Sanga *et al.*, 2021). Women farmers, especially from the middle class, are increasingly active in the struggle to obtain rights to agrarian resources, including the right to live and manage the land they work on, as well as demanding justice against sexual violence as part of caste and patriarchal oppression (Singh, 2017). Cultural barriers and patriarchal norms prevent women farmers from participating in important decisions. Research highlighting how migrant women manage remittances takes into account patriarchal norms that influence their decisions, even though their economic contributions give them little room to negotiate in a gender-structured society (Myint and Lertchavalitsakul, 2021). Patriarchal norms worsen women farmers' access to land and natural resources, especially in indigenous communities. Multiple discrimination and patriarchal power structures are the main obstacles, adding to women's difficulties in fighting for their collective and individual rights to land and natural resources (Errico, 2021). This study shows that targeted public food procurement programs, such as Brazil's National Food Program, can increase women's involvement in agricultural decision-making, especially in the southern region of Brazil (Valencia *et al.*, 2021). This injustice widens the economic and social gap between women and men farmers. The problem of economic inequality deepens for women farmers due to limited access to technology and training. Government efforts to expand accessibility and economic equality can play an important role in reducing this gap (Anthony and Padmanabhan, 2020). Injustice against women farmers magnifies social inequality by ignoring different social and economic conditions, similar to injustices in Latin American cities that affect the safety and maintenance of green public

spaces (Delgado da Silva *et al.*, 2024). This research reveals that gender discrimination has a significant impact on the economic efficiency gap between female and male farmers. Gender stereotypes and unequal access to productive resources affect women's agricultural efficiency, reducing the profits and sustainability of their agricultural businesses (Sadiq *et al.*, 2022). The study of the Gender Empowerment Index for Climate Smart Villages (GEI-CSV) is based on four main indicators political, economic, agricultural, and social. This study shows a significant gender gap between men and women in climate-smart villages in India, both in the western and eastern Indo-Gangetic plains regions, illustrating the differences in levels of empowerment between men and women in farming households (Hariharan *et al.*, 2020). Social and economic disparities between men and women in agriculture are reflected in unequal access to agricultural resources. Although women contribute significantly to agricultural production, their access to land and other resources is still limited compared to men. Women often face cultural restrictions in accessing land, while men tend to dominate ownership and control of these resources.

Research shows that disparities in resource access limit women farmers from managing farms on a larger scale and crop selection, affecting their image as "real" farmers in the public consciousness. However, women farmers often use creative strategies to overcome these challenges, showing that they can adapt to various agricultural scales even with more limited or different resources (Dentzman and Lewin, 2024). Solutions to resource access in gender sociology involve empowering women farmers through extension and skills training. Most smallholder farmers rely on rain-fed agricultural systems, making them vulnerable to climate variability and extremities. Climate information services (CIS) offer adaptation solutions, emphasizing the importance of technological literacy, education, and consulting services for access and adoption. Special consideration should be given to vulnerable groups such as women, the elderly, and poor farmers to increase CIS adoption (Nyoni *et al.*, 2024). The changing role of women farmers in the context of climate change shows their unequal access to climate-smart agricultural (CSA) practices. This study highlights how limited land ownership, poor access to credit, and lack of information hinder the adoption of CSA by women farmers, as well as the importance of farmer groups and cooperatives to support their role (Barooah *et al.*, 2023). The transformation of women farmers can increase their access to extension and skills education. Where counseling and skills training affects their access to resources. Even though women and men have the same access to resources, the benefits are different due to differences in formal and informal organizational networks. Extension and skills training influence resource access. Research findings indicate that lack of adequate information and training hinders effective implementation. Key challenges include a lack of



understanding and motivation from women as well as a lack of training and clear guidelines. To increase access to resources, there needs to be increased communication and training. The changing role of women farmers improves the distribution of community resources. Inclusive policies that support gender equality encourage the transformation of the role of women farmers in accessing resources. Through extension, skills training, and inclusive policies, women farmers can be more active and equal in utilizing and managing resources in their communities.

MATERIALS AND METHODS

This research was conducted in Lambusa Village and Pombulaa Jaya Village, Konda District, taking into account that both villages have a Women's Farming Group (KWT) which is a Village Assisted by the Agricultural Extension Agency and the Food Security Agency of South Konawe Regency. The research was carried out in January-June 2024. The research population was all female farmers who were members of the Women Farmers Group (KWT), totaling 87 people. The sample size was determined using the Slovin method, and a sample of 47 people was obtained. Sampling was carried out by purposive sampling. This type of research is quantitative research with an explanatory survey method, using a mixed-method quantitative and qualitative approach. Primary data was obtained by observation, questionnaires, and in-depth interviews. Secondary data was obtained from written documents at the Agricultural Extension Agency and the Food Security Agency of South Konawe Regency. Secondary data was also obtained through various scientific articles. The research variables consist of 2 independent variables, namely agricultural extension (X1) and skills training (X2), as well as the dependent variable (Y), namely access to resources (land, financial capital, technology, credit, markets and information) variable measurement. The instrument uses a Likert scale, which is a scale used to measure attitudes, opinions, and perceptions of a person or group of people in certain events. On a Likert scale, a score of 5 = strongly agree, a score of 4 = agree, a score of 3 = disagree, a score of 2 = disagree and a score of 1 = strongly disagree. Data analysis uses multiple linear regression analysis to identify the influence of the independent variable on the dependent variable. All quantitative data were obtained entered in Microsoft Excel and processed using the SPSS 26.0 program. for Windows. Qualitative data in the form of interview results, was analyzed through three stages, namely data reduction, presentation, and conclusion. This research hypothesizes that counseling and skills training are thought to be able to increase women farmers' access to community resources. Transforming the role of women farmers into a more active role can improve resource distribution. Inclusive policies that support gender equality

can encourage positive transformation in access to resources by women farmers.

RESULTS AND DISCUSSION

The Influence of Counseling and Skills Training on Resource Access: In the beginning, women farmers worked hard in the fields to meet their daily needs. They wake up before sunrise, prepare breakfast for the family, then go to the rice fields or gardens. Their work is hard and tiring, with traditional farming methods that are less efficient and yields that are not optimal. Their income is very limited, often only enough for basic needs such as food and clothing. Many of them do not know more modern and environmentally friendly farming techniques, as well as additional skills that can increase income. Apart from that, their access to education and information is also very limited. They rarely participate in counseling or training due to various obstacles such as costs and limited time because they have to take care of the household. As a result, they cannot take advantage of existing opportunities to improve their standard of living. Many female farmers feel marginalized and lack confidence in contributing more to the community and family economy. After participating in the extension and skills training program, the condition of these women farmers experienced significant changes. The education provided includes modern agricultural techniques, appropriate use of fertilizers and pesticides, as well as more efficient land management. With this new knowledge, they were able to increase their crop yields significantly, which ultimately increased their family income. Apart from that, skills training also gives them additional abilities such as handicraft skills, processing agricultural products into value-added products, and entrepreneurial skills (small business). Farming women are starting to produce handicrafts that are sold at local markets and online, as well as processing the harvest into products such as jam, chips, tofu, and tempeh. This not only increases their income but also opens up new business opportunities in the village. With new knowledge and skills, female farmers become more confident and independent. They are more active in community activities, participate in farming groups, and dare to voice their opinions in decision-making in the village. Economic improvements also bring socio-economic changes in their communities, where women farmers receive higher respect from society and their families. Empowering farmer groups through extension programs and skills training has succeeded in increasing members' knowledge, skills and income (Efrina, 2022). Empowerment through counseling and skills training increases women's access to resources quickly and effectively (Rimayasi *et al.*, 2022). Agricultural extension services aim to improve the welfare of farmers and farmer groups, including women farmer groups (KWT) (Amisnawati and Syafruddin, 2023). Farming women's access to extension is lower than men's, reflecting large



gender and cultural barriers. This study empirically proves the need for agricultural extension in increasing women farmers' access to resources (Lee *et al.*, 2023). Apart from that, the importance of skills training for women farmers is because they have an important role in facilitating the use of digital technology in agriculture, reducing gender gaps in access and use of technology, as well as improving their social and economic welfare (Kudama *et al.*, 2021). Increasing the skills of women farmers emphasizes cultural identity, as well as increasing their economic role through agritourism, which supports financial independence and revitalization of rural areas (Meutia *et al.*, 2022). The importance of improving women's skills is due to their contribution which includes knowledge, skills, natural resource management, community resilience, and education and awareness. However, they face challenges such as limited access to resources and gender-based discrimination (Onoh *et al.*, 2023). The results of research conducted in Konda District, South Konawe Regency on women farmers in farming communities, show that in the transformation of women farmers through empowerment, it was found that counseling and skills training had a significant effect on women farmers' access to resources including land, financial capital, technology, credit, markets, and information) which can be explained as follows.

Statistical Test Results t: To explain how much influence an independent variable has on the dependent variable, can be done using the t statistical test.

Table 1 shows that the agricultural extension variable (X1) has a significant value of $0.000 < 0.05$ and a calculated t value of 3.952, which means that partially access to resources (Y) is influenced positively and significantly by agricultural extension (X1). The skills training variable (X2) has a significant value of $0.015 < 0.05$ and a calculated t value of 2.542, indicating that partially access to resources (Y) is influenced positively and significantly by skills training (X2).

F Statistical Test Results: To test whether the dependent variable (Y) is linearly related to the independent variables (X1) and (X2), the F test is used which is useful for testing the overall significance of the observed and estimated regression lines. To test how significantly resource access is influenced by agricultural extension and skills training, the F test was used, the results of which are in Table 2.

In Table 2 it is known that the significant value is $0.000 < 0.05$ and the calculated F value is 28.285, indicating that access to resources (Y) is influenced positively and significantly simultaneously by agricultural extension (X1) and skills training (X2).

Multiple Linear Regression Analysis: To predict the position of the dependent variable, multiple linear regression analysis is used.

Based on Table 3, the following multiple linear regression equation is obtained:

$$Y = 2.679 + 0.557 X1 + 0.369 X2$$

Information:

Table 1. t-test results.

Model	Coefficients are not standardized		Standardized coefficients		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	2.679	5.079			0.528	0.600
Agricultural extension (X1)	0.557	0.141	0.504		3.952	0.000
Skills training (X2)	0.369	0.145	0.324		2.542	0.015

a. Dependent Variable: Access resources

$$Y = 2.679 + 0.557 X1 + 0.369 X2$$

Table 2. F-test results.

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig. ^b
1	Regression	361.386	2	180.693	28.285	.000 ^b
	Residual	281.082	44	6.388		
	Total	642.468	46			

a. Dependent Variable: Access resources

b. Predictors: (Constant), Skills training, Agricultural extension

Table 3. Results of Multiple Linear Regression Analysis.

Model	Coefficients are not standardized		Standardized coefficients		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	2.679	5.079			0.528	0.600
Agricultural extension (X1)	0.557	0.141	0.504		3.952	0.000
Skills training (X2)	0.369	0.145	0.324		2.542	0.015

a. Dependent Variable: Access resources



Y = Resource access ; X1 = Agricultural extension; X2 = Skills training

From the multiple linear regression equation it can be interpreted that:

1. The results of a significant value of 0.000 for the agricultural extension variable and a significant value of 0.015 for the skills training variable show that these two variables have a significance value of <0.05 with a constant value of 2,679.
2. The coefficient value of the agricultural extension variable is 0.557, indicating a positive value, meaning that the influence of agricultural extension on access to resources is positive and strong. In the sense that access to resources will increase if agricultural extension increases.
3. The coefficient value of the skills training variable is 0.369, indicating a positive value, meaning that the effect of skills training on access to resources is positive and strong. In other words, access to resources will increase if skills training increases.

Coefficient of Determination Test (R^2): To measure the extent of the model's ability to explain variations in the dependent variable, the coefficient of determination (R^2) can be used.

In Table 4 it is known that the Adjusted R Square coefficient of determination is 0, 543 or 54.3%, this shows that if it is 54.3%, the resource access variable can be explained by the agricultural extension and skills training variables. On the other hand, the remaining 45.7 % is explained by other variables not examined in this research. The results of this research also show that increasing women farmers' access to resources (land, financial capital, technology, credit, markets, and information) has contributed to a fairer distribution of resources in farming communities.

Transformation of the role of women farmers in accessing agricultural resources: In the past, women farmers were often at a disadvantage in terms of access to agricultural resources. Patriarchal social norms limit women's roles in the agricultural sector, forcing them to work on small plots of land or in tasks deemed "less important." Land rights, for example, are often only given to men, either as heads of families or main heirs. This condition means that women do not have full control over the land they work on. Women's control over land includes property rights, access, and land use, enabling economic empowerment, gender equality, and influence in community decision-making, thereby

strengthening women's role in development and social welfare (García-Morán and Yates, 2022). Apart from that, access to agricultural extension and training is also very limited for women. This results in a lack of knowledge about modern agricultural techniques, more efficient use of agricultural equipment, and information about markets. This limitation further weakens the position of women farmers in increasing their productivity and income. This study shows that women farmers face obstacles to technology adoption due to limited capital, access to information, credit facilities, and markets, which affect their productivity and income (Masere and Worth, 2022). The transformation of the role of women farmers is starting to appear in line with the social and economic changes that occur. Increasing levels of education and awareness of the importance of gender equality have encouraged more women to become actively involved in the agricultural sector. Various government programs and non-government organizations (NGOs) also play an important role in opening up women's access to agricultural resources. For example, training programs specifically for female farmers are now being carried out in various areas in Konda District. This training not only covers agricultural techniques, but also farm business management, financial access, and product marketing. With better knowledge and skills, women farmers can now manage their land more efficiently and produce high-quality agricultural products. Access to financial resources is another aspect that is experiencing significant change. Many microfinance institutions now provide special financial services for women farmers. Access to credit and business capital allows women to invest in agricultural technology, purchase improved seeds, and improve their agricultural infrastructure. This not only increases agricultural productivity but also family income (Abraham, 2018). The analysis results show that microfinance services are beneficial for vulnerable farmers, especially women farmers. A concrete example of this change is the People's Business Credit (KUR) program which is intended for small farmers, including women. With this program, women farmers have the opportunity to access funds with low interest and easier terms, so that they can develop their farming business more optimally. Although there have been many positive changes, challenges remain. Patriarchal cultural norms and gender stereotypes are still the main obstacles for women farmers. However, with increasing awareness of the importance of gender equality and support from various parties, women farmers' access to resources will increasingly improve. The

Table 4. Coefficient of determination test results (R^2).

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.750 ^a	.562	.543	2.527

a. Predictors: (Constant), Skills training, Agricultural extension



transformation of the role of women farmers in access to resources is proof that with collective will and effort, significant change can occur. Farming women are now not only behind-the-scenes workers but also the main movers in sustainable and competitive agriculture.

Inclusive policies support gender equality: Women and men in rural areas play an important role in agricultural productivity and the household economy. However, women's contributions are often overlooked in economic analysis and agricultural policy. For inclusivity, policies must consider gender factors in extension services, access to credit, informal education, and information so that women farmers are involved in decision-making. The formation of small-scale cooperatives allows women to overcome gender inequality, develop inter-organizational business relationships, and gain access to financial resources, supporting long-term gender equality (Theeuwes *et al.*, 2021). Gender dynamics in the adoption of agricultural innovation, finding obstacles faced by women. Inclusive policies that have a gender sociology perspective to empower women and improve rural welfare need to be implemented (Valerio *et al.*, 2024). Because women farmers are one of the pillars of the rural economy, food security, and sustainable livelihoods. However, institutionalized gender inequality limits women in the small agricultural sector. Therefore, policies that support gender equality, including legal and social reforms, are needed to empower women and improve justice in society (Tirivangasi *et al.*, 2023).

The promotion of gender equality in access to productive resources is supported by many valid arguments. However, whether providing equal resources will result in equivalent agricultural productivity remains controversial. Panel data shows that female farmers use less technology than male farmers. Even though female farmers use the same inputs and are as efficient as male farmers, their yields may still be lower. The analysis shows that the distribution of productive characteristics and crop choice does not adequately explain these technological differences. Only farmers who use inorganic fertilizers have their technology levels (Scholz and Abdulai, 2022). However, income inequality affects economic growth through several channels. Strong empirical support is found for the negative impact of inequality on growth through the education/fertility channel. The data also supports capital market imperfections. In contrast, empirical support is lacking for explanations based on distribution channels. The results show that income inequality causes higher economic growth to be offset by channels that cause inequality to harm growth. Based on these findings, this research proposes policies that can be implemented by governments to narrow the gap between rich and poor and ensure a fairer distribution of economic resources. From a gender sociology perspective, the importance of a more equitable distribution of resources for women farmers is emphasized. The proposed policy emphasizes the need for the

government to narrow the gap between rich and poor, with a particular focus on empowering women farmers to ensure fairer economic distribution (Le and Nguyen, 2019). In the context of gender sociology, the transformation of the role of women farmers is very important. Changes in the way food is produced, processed, and consumed are not only important for food security and poverty alleviation but also create new job opportunities and economic development. For example, groups of young urban farmers, the new achikumbi elite in Malawi, use digital platforms to access commercial markets, training and advice, although digital technologies must ensure equitable access for all (Tausie *et al.*, 2024). Studies reveal that startup digital transformation is influenced by social capital, human capital, and access to resources. In the context of gender sociology, access to resources plays an important role in digital transformation. The results show that the relationship between social capital and digital transformation is partly mediated by access to resources and human capital, reinforcing the importance of networks of relationships in dealing with crises (Nguyen *et al.*, 2023). Despite many efforts to increase women's empowerment in agriculture, they are still often marginalized in many parts of the world. This is reflected in the gender gap in the implementation of agricultural extension and advisory services, which results in unequal access to resources and knowledge for women farmers. Gender cannot be separated from the context of place and time, as shown by this study which examines the impact of gender and geography on farmers' access to resources and knowledge and their agency in making decisions (Witinok-Huber and Radil, 2021). The results of the descriptive analysis show that the majority of female farmers are involved in raising livestock with several obstacles such as religious rules, limited mobility, and a lack of significant sources of information. Involvement in decision-making tends to increase as women get older, but the majority of decisions are still made by their husbands, reflecting the still strong gender dominance in society (Safdar *et al.*, 2021). The importance of gender and youth integration in Agricultural Research and Innovation (R&I) to strengthen the impact and inclusivity of research initiatives cannot be understated. Exclusive norms regarding gender and age often hinder the role of women and youth in the food system. Research shows the need for a holistic approach in considering their critical role in transforming access to agricultural resources (Yami *et al.*, 2024).

Conclusion: Based on the results and discussion above, it can be concluded that counseling and skills training have a significant effect on increasing women farmers' access to resources in the community. This increase allows women farmers to be more involved in the resource distribution process, thereby ensuring a fairer and more equitable distribution. Inclusive policies that support gender equality have also proven effective in encouraging the transformation



of the role of women farmers, giving them greater access to community resources. Thus, transforming the role of women farmers through extension, skills training, and inclusive policies not only strengthens their position in the community but also increases access and utilization of resources more fairly and efficiently. These results emphasize the importance of a comprehensive and sustainable approach to empowering women farmers in the context of gender sociology in agriculture.

Ethical approval: All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

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Informed consent: Written informed consent was obtained from all participants regarding publishing their data.

SDG's Addressed: Gender Equality, No Poverty, Zero unger, Reduced Inequality, Decent Work and Economic Growth.

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